FHWA	STATE	FED. AID	SHEET	TOTAL
REGION NO.		PROJ. NO.	NO.	SHEETS
3	MD			

PROJECT DESCRIPTION

I. <u>GENERAL</u>

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNALWITH INTERCONNECT AT THE INTERSECTION OF MD 140 AND FESTIVAL AT WOODHOLME/STANDISH LIVING ENTRANCE IN BALTIMORE COUNTY. THIS MODIFICATION IS REQUIRED BECAUSE OF THE ADDITION OF THE WEST LEG OF THE INTERSECTION. MD 140 IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION PRESENTLY OPERATES IN A NEMA FOUR (4) PHASE, FULLY-TRAFFICACTUATED MODE. THERE IS A EXCLUSIVE/PERMISSIVE LEFT TURN FOR SOUTHBOUND MD 140.
MD 140 THROUGH MOVEMENTS RUNS CONCURRENT THE FESTIVAL WOODHOLME MOVEMENT RUNS ALONE.

THE INTERSECTION IS TO BE MODIFIED TO OPERATE IN A NEMA SIX (6) PHASE, FULLY-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT TURNS FOR BOTH NORTH AND SOUTHBOUND MD 140. MD 140 THROUGH MOVEMENTS WILL RUN CONCURRENTLY. THE SIDE STREET ENTRANCES WILL OPERATE CONCURRENTLY ALSO. THE EXISTING CABINET AND CONTROLLER WILL BE UTILIZED.

III. SPECIAL NOTE

THE S.H.A. SIGNAL SHOP WILL PERFORM ALL INTERNAL WIRING AND MODIFICATIONS TO THE CABINET. THE CONTRACTOR WILL RUN AND TAG ALL CABLE INTO THE CABINET AND CONTACT MR. ED RODENHIZER AT (410) 787-7650, SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE WIRING OF THE EXISTING CABINET.

EQUIPMENT LIST

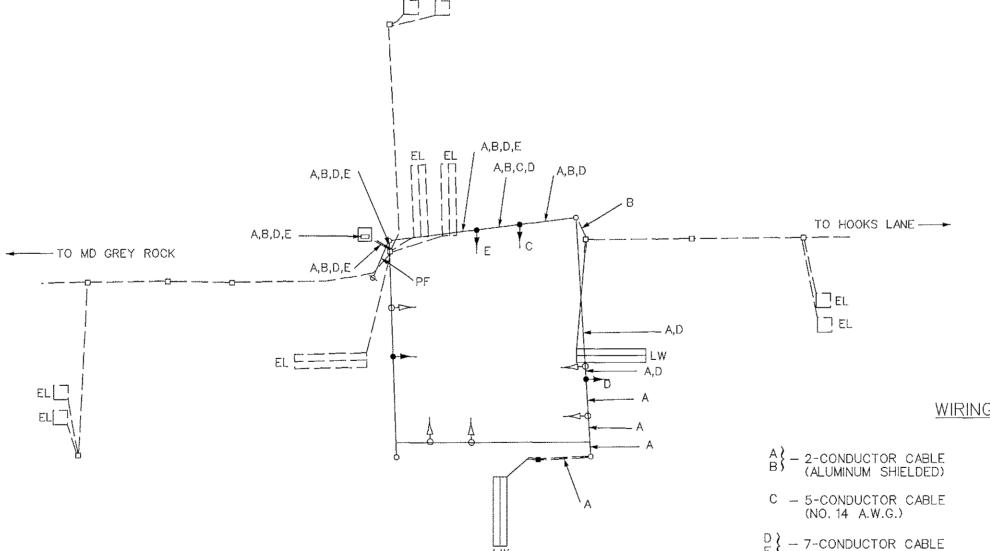
A. EQUIPMENT TO BE SUPPLIED BY S.H.A. AND INSTALLED BY THE CONTRACTOR.

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
1	EA	816	TWO-CHANNEL LOOP DETECTOR AMPLIFIER WITH TIME DELAY OUTPUT WITH DETECTOR PANEL AND HARNESS
1	EA	813	30" X 36" R3-5(L) SIGN - SPAN WIRE MOUNT
1	EA	813	36" X 42" R10-12 SIGN - SPAN WIRE MOUNT
1	EA	814	12"/8", ONE-WAY, FIVE SECTION (R,Y,G,YA,GA) ADJUSTABLE TRAFFIC SIGNAL HEAD WITH PROPER SPAN WIRE MOUNTING HARDWARE AND TUNNEL VISORS
4	EA	814	12", ONE-WAY, THREE SECTION (R,Y,G) ADJUSTABLE TRAFFIC SIGNAL HEAD WITH PROPER SPAN WIRE MOUNTING HARDWARE AND TUNNEL VISORS
1	EA	816	LOAD SWITCH
1	EA	813	30" X 30" R5-1 SIGN - GROUND MOUNT
1	EA	813	30" X 36"X 36" R1-2 SIGN - GROUND MOUNT
2	EA	813	18" X 24" R4-7 SIGN - GROUND MOUNT

EQUIPMENT LIST (CONT'D.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
LUMPSUM	LS	108	MOBILIZATION
LUMPSUM	LS	108	MAINTENANCE OF TRAFFIC (TRAFFIC CONTROL)
1	EA	811	HANDHOLE
270	LF	815	SAW CUT
700	LF	810	LOOP DETECTOR WIRE (NO. 14 A.W.G.) ENCASED IN FLEXIBLE TUBING
520	LF	810	2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
25	LF	810	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
325	LF	810	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
15	LF	805	1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR LOOP DETECTOR LEAD-IN
25	LF	805	2" POLYVINYL CHLORIDE (SCHEDULE 40) CONDUIT - TRENCHED
300	LF	555	PREFORMED PAVEMENT MARKINGS - WHITE 5" WIDE FOR LANE LINES
25	LF	555	PREFORMED PAVEMENT MARKINGS - WHITE 24" WIDE FOR STOP LINE
500	LF	555	PREFORMED PAVEMENT MARKINGS - DOUBLE YELLOW 5" WIDE FOR CENTER LINES



WIRING NOTES

D - 7-CONDUCTOR CABLE (NO. 14 A.W.G.)

LW — LOOPWIRE (NO. 14 A.W.G.) IN FLEXIBLE TUBING

EL - EXISTING LOOPWIRE

PF - POWER FEED

(R) (R) (Y) (G) (G)

<u>PHASE CHART</u>

1 2 3 4 5 6 7 8 9

Phase 1 & 5	R ← G —	R ← G —	R	R ← G —	R	R	R	R	R	4
1 & 5 Change To Phase 1 & 6 or Phase 2 & 5								♦		
Phase 1 & 6	G ← G —	G	G	R	R	R	R	R	R	Ŷ
1 Change	G ← Y ←	G ← Y	G	R	R	R	R	R	R	——→
Phase 2 & 5	R	R	R	-G -G-	G	R	R	R	R	→ ——
5 Change	R	R.	R	- G - Y	G	R	R	R	R	\
Phase 2 & 6	G	G	G	G	G	R	R	R	R	↓
2 & 6 Change	Y	Υ	Y	Y	Υ	R	R	R	R	→
Phase 4 & 8	R	R	R	R	R	G	G	G	G	
4 & 8 Change	R	R	R	R	R	Υ	Y	Y	Υ	↓
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	↓ ↓ ↓ ↓ ↓ ↓ ↓

GEOMETRIC LEGEND === EXISTING GEOMETRICS

PROPOSED GEOMETRIC:

UTILITY LEGEND --- G--- GAS MAIN ---- w ---- WATER MAIN — s — SEWER MAIN ---- ELECTRIC CABLES - D - STORM DRAIN

---- A ---- AERIAL CABLES

TELEPHONE CABLES

The Traffic Group, Inc.
Suite 600

40 W. Chesapeake Avenue
Towson, Maryland 21204
410-583-8405
1-800-583-8411 Fax 410-321-8458

Job No.9505/2

MDOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION

MD 140 and Entrance to DRAWN BY: M.A. MEARS M.A. MEARS Standish Living COUNTY: BALTIMORE

TS/STD. NO. DATE: OCTOBER 18, 1995 F.A.P. NO. S.H.A. NO. <u>BW-138-801-412</u> SCALE: _1"=20'

LOG MILE # 03014002.25 SHEET NO. 2309A-GI